# SCIENCE Second Grade

# LIFE SCIENCE STANDARDS

### 1.0 Cell Structure and Function

The student will investigate the structure and function of plant and animal cells.

Key	Reporting Category		PLT ACTIVITY
D		Use magnifiers to study smaller parts of animals and identify their functions.	N/A
D		Use magnifiers to observe and describe what occurs when a plant or an animal loses a specific part.	N/A

## 2.0 Interactions Between Living Things and Their Environment

The student will investigate how living things interact with one another and with nonliving elements of their environment.

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I		Categorize objects as living or nonliving.	21 Adopt a Tree p. 97	
			79 Tree Lifecycle (variation) p. 341	
D		Determine how animals interact with the living and nonliving elements in their	3 Peppermint Beetle p. 23	
_		environment through the senses.	4 Sounds Around p. 26	
		on nominal anough the senses.	24 Nature's Recyclers p. 108	
			47 Are Vacant Lots Vacant? p. 200	
Ţ		Determine how organisms interact with the nonliving elements of their environment.	24 Nature's Recyclers p. 108	
1		2 committee in a regulariant man in in initial and initial a	25 Birds and Worms p. 111	
			27 Every Tree for Itself p. 117	
			46 Schoolyard Safari p. 197	
			79 Tree Lifecycle p. 341	
D		Recognize different types of pollutants.	4 Sounds Around (enrichment) p. 26	
-		recognize directive types of pollutation	36 Pollution Search p. 153	

### 3.0 Food Production and Energy for Life

The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.

D	Compare how plants and animals satisfy their basic requirements for life.	16 Pass the Plants Please p. 77
		22 Nature's Recyclers p. 108
		63 Tree Factory p. 269

## 4.0 Heredity and Reproduction

The student will understand the basic principles of inheritance.

I	Recognize that all living things come from other living things.	43 Have Seeds, Will Travel p. 185
I	Match offspring with their parents.	N/A
I	Recognize that as an organism grows, its appearance may change.	41 How Plants Grow p. 179 65 Bursting Buds p. 277 79 Tree Lifecycle p. 341

# 5.0 Diversity and Adaptation Among Living Things

The student will understand that living things have characteristics that enable them to survive in their environment.

D	Provide specific examples of differences among animals of the same kind.	N/A
D	Classify an organism according to the environment in which it can best survive.	6 Picture This! p. 34
		25 Birds and Worms p. 111 43 Have Seeds, Will Travel p. 185

## 6.0 Biological Change

The student will understand that living things have changed over time.

Ι	Recognize that some plants and animals that formerly inhabited the earth are no longer	N/A
	present on earth.	

KEY

I = Introduced D = Developing A = State Assessed M = Mastered

REPORTING CATEGORY

SF = Structure & Function of Organisms
LC = Life Cycles & Biological Change

ME = Motion & Forces, Forms of Energy
E = Ecology
M = Matter
ER = Earth Features & Resources
SC = Space, Weather, & Climate

### EARTH SCIENCE STANDARDS

### 7.0 Earth and Its Place in the Universe

The student will investigate the structure of the universe.

D	Recognize that there are innumerable stars in the nighttime sky that vary in brightness, color, and location.	N/A
D	Recognize that the sun is the brightest object in the sky and earth's closest star.	N/A
D	Determine the approximate time of day from the position of the sun in the sky.	N/A
I	Recognize that the phases of the moon occur in a predictable pattern.	N/A

#### 9.0 Earth Features

The student will understand that the earth has many geological features that are constantly changing.

D   Recognize the earth's major geological features (e.g., mountains, oceans, and lakes).
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#### 10.0 Earth Resources

The student will investigate the properties, uses, and conservation of earth's resources.

I	Recognize the components of soil and sand.	70 Soil Stories p. 297
I	Observe the properties of sand and soil.	70 Soil Stories p. 297
D	Identify various methods to conserve earth resources (e.g., soil, trees, and water).	13 We All Need Trees (part B) p. 65 15 A Few of My Favorite p. 75 30 Three Cheers for Trees p. 130 51 Make Your Own Paper p. 224

## PHYSICAL SCIENCE STANDARDS

### 11.0 Forces and Motion

The student will investigate the effects of force on the movement of objects.

D	Recognize that objects fall unless supported.	N/A
I	Identify materials that are attracted to magnets.	N/A
D	Observe how changing the amount of weight affects a balanced system.	N/A

# 12.0 Structure and Properties of Matter

The student will investigate the characteristic properties of matter.

D	Identify physical properties that can be used to describe a material.	1 The Shape of Things p. 17
		2 Get In Touch with Trees p. 20
		61 The Closer You Look p. 263
D	Describe ways in which a material can be changed.	N/A

### 13.0 Interactions of Matter

The student will investigate the interactions of matter.

D	Recognize that when substances combine they may retain their individual properties (e.g., salt and pepper).	N/A
D	Recognize that when substances combine they may lose their individual properties (e.g., powdered drink mix with water).	N/A

#### 14.0 Energy

The student will investigate energy and its uses.

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	D		Compare the heating and cooling rates of land, air, and water.	N/A

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